NOTE ON A HOLOCENE DEPOSIT AT PENTON HOOK.

By J. E. COOPER.

Read 9th December, 1921.

The section here described is at the middle of the U-shaped bend of the Thames at Penton Hook, on the Middlesex bank. Mr. W. J. Wintle called my attention to it some years ago, and if he had remained in London he would probably have described it.

The river bank is here about 7 feet above the normal water-level;

a section in the centre shows:-

Thin turf
Brick earth with a few shells
Coarse gravel and sand
Fine gravel and sand with Plan.
stræmii, and abundance of shells
Thin bed of fine sand without shells
Base hidden by talus, probably stiff
clay as shown in the river bank
close by

A few inches.
About 2 feet.
About 15 inches.
About 18 inches.
A few inches.

The following mollusca were collected from the shell-bed containing Planorbis stræmii:—

Vitrea crystallina (Müll.).
Polita nitidula (Drap.).
Goniodiscus rotundatus (Müll.).
Hygromia hispida (L.).
H. striolata (C. Pfr.).
Vallonia excentrica Sterki.
Helicigona arbustorum (L.).
Helix nemoralis L.
H. hortensis Müll.
Cochlicopa lubrica (Müll.).
Pupilla muscorum (L.).
Succinea putris (L.).
S. elegans, Risso.
Anculus fluviatilis Müll.

Ancylus fluviatilis, Müll. Limnæa auricularia (L.).

L. pereger (Müll.).
L. palustris (Müll.).
L. truncatula (Müll.).
L. stagnalis (L.).

Planorbis corneus (L.).
P. albus Müll.

P. stræmii West. P. crista (L.).

P. carinatus Müll.

P. umbilicatus Müll.

P. vortex (L.).

P. leucostoma, Millet.

P. contortus (L.).

Bithynia tentaculata (L.).

B. leachi (Shepp.). Vivipara vivipara (L.).

V. fasciata (Müll.).

Valvata piscinalis (Müll.). V. cristata Müll.

Theodoxus fluviatilis (L.).

Unio pictorum (L.).
U. tumidus Retz.

Anodonta anatina (L.).

Pseudanodonta elongata Hol.

Sphærium corneum (L.). Pisidium amnicum (Müll.).

P. supinum A. Schm.

P. subtruncatum Malm.

P. cinereum Alder.

P. obtusalastrum B. B. Woodw.

P. nitidum Jenyns.
P. milium Held.

P. torquatum Stelf.

This list of mollusca is shorter than those for the Staines and Boveney sections, but it includes three species worth noting, viz. Vivipara fasciata, Pseudan. elongata, and Pisid. torquatum. The two last-named species live to-day in the river close by, and V. fasciata is plentiful in ditches a few miles up-stream.

Once again I have to thank Mr. B. B. Woodward for his kindly

help in naming the Pisidia.

J. E. COOPER.

NOTE ON THE GENERA NEPTUNEA AND SYNCERA.

By Dr. W. H. DALL.

Read 9th December, 1921.

A PROPOS of a reference to the name Neptunea in the last number of the Society's Proceedings (p. 206) by Mr. Iredale, I would say that no one will deny the right of an author (given a heterogeneous assembly with no type named) to select one of the species as the type of a new genus. N. despecta, Bolten (not of Linnæus) is founded on a figure of Chemnitz, representing the ancient Fusus antiquus of British authors and the Murex antiquus of Linnæus. This same species was selected by Swainson as the type of his new genus Chrysodomus more than eighty years ago. It appears in his text as C. argyrostomus, and is specified as typical on page 90 of his Manual. So whatever species be nominated as type of Neptunea, Bolten, it cannot be the type of Chrysodomus. Also Mr. Iredale is quite mistaken in supposing that Neptunea has been used for Chrysodomus "without question" and commonly by British and American authors. From Carpenter in 1863 down to the present time the group of species in question has been in use as Chrysodomus in this country generally, except when the old term Fusus was employed.

I can leave Dr. Bartsch to deal with Mr. Iredale's assumption in regard to Syncera, but can hardly regard a species with four or five lines of diagnosis giving essential and (at that time) unique

anatomical characters as a nomen nudum.

November 12, 1921.

WM. H. DALL.